

To: Regional Directors, Regional Managers

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Subject: Notice to Designers No. 7 – CHSTP Facilities Naming Convention

The following facilities naming convention shall be used for 30% Design deliverables. In cases where a naming convention is not given for a certain facility, the PMT will provide the reference designators. Appendix A provides a summary of the detailed naming convention.

1. SUBDIVISIONS

It is standard practice for US. railroads that large track systems are traditionally divided into manageable sections called branches or subdivisions. This is vital in enabling the location of trains, physical plant and assets, and to define right-of-way maintenance sections.

It is proposed that the CHSTP be apportioned into seven “subdivisions”. A single alpha character shall used to identify each subdivision:

- | | | |
|------------|-------------------------|--|
| • B | Bay Subdivision | – Extends from San Francisco to CP Divide |
| • S | Sierra Subdivision | – Extends from CP Divide to Bakersfield |
| • D | Desert Subdivision | – Extends from Bakersfield to Los Angeles |
| • T | Tongva Subdivision | – Extends from Los Angeles to Anaheim |
| • C | Capitol Subdivision | – Extends from CP Divide to Sacramento |
| • J | San Jacinto Subdivision | – Extends from CP Inland Junction to San Diego |
| • P | Pacheco Subdivision | – Extends from CP San Joaquin to CP Merced |

2. MILEPOSTS

In accordance with the majority of US railroads, the “initial” mile post (MP) on the system is designated 0.0 beginning at the initial subdivision.

It is proposed that the CHSTP’s, Bay Subdivision begin at milepost 0.0 in San Francisco prefixed with the initial letter designation of the subdivision where the milepost is located. It is further proposed that all subsequent high-speed corridor extensions (links to Sacramento and San Diego) begin at the milepost located at the junction where the extensions connect to the primary corridor “spine” of San Francisco-Los Angeles-Anaheim, and increasing milepost from North to South. Refer to Figure 1.

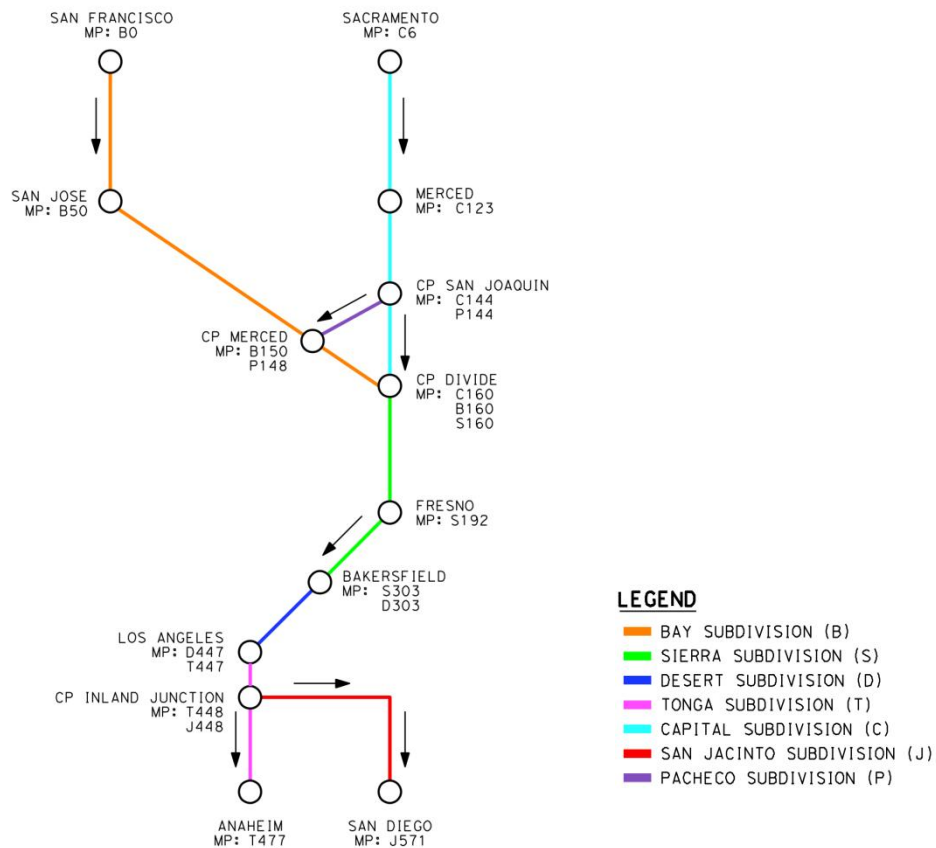


Figure 1 – Milepost and Stationing

	Milepost ⁽¹⁾		Stationing ⁽¹⁾	
	Approx.	Equality	Approx.	Equality
San Francisco	B0		B100+00	
San Jose	B50		B2800+00	
CP Merced	B150	P148	B8100+00	P8300+00
CP Divide	B160	C160 S160	B9000+00	C9000+00 S9000+00
Fresno	S192		S11000+00	
Bakersfield	S303	D303	S17000+00	D17000+00
Los Angeles	D447	T447	D23710+00	T23710+00
CP Inland Junction	T448	J448	T23760+00	J23760+00
Anaheim	T477		T26000+00	
Sacramento	C6		C500+00	
Merced	C123		C7000+00	
CP San Joaquin	C144	P144	C8000+00	P8000+00
San Diego	J571		J31000+00	

⁽¹⁾ Milepost and Stationing is approximate and has been provided as reference, it should be confirmed as the alignments are refined.

3. TRACK

- a. A two-character reference designator shall be used for HST Tracks: an alpha character followed by a numeric.

All tracks will use as prefix the single alpha character subdivision identifier, except for terminals.

In addition, HST tracks shall be designated as “1” for northbound and “2” for southbound. Where there are more than two HST tracks the additional ones are numbered on site specific bases, with the use of odd numbers for southbound and even numbers for northbound. “Xn”. e.g. Sierra SB tracks **S2, S4**; Bay NB tracks **B1, B3**.

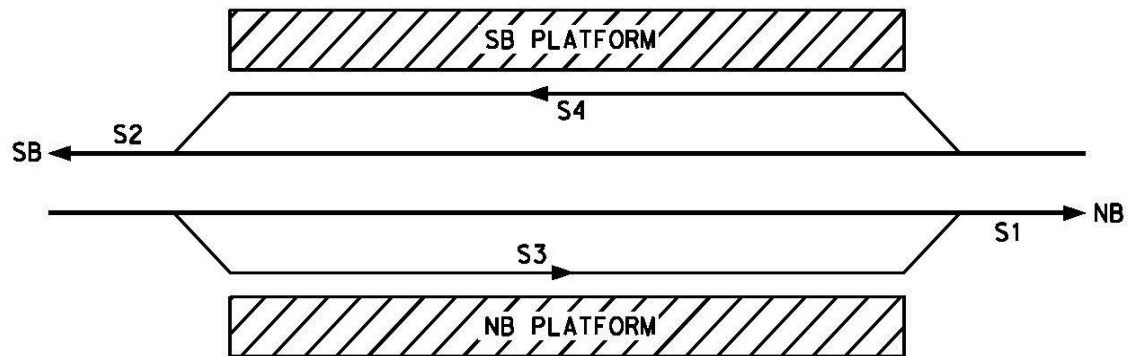


Figure 2 – Station Tracks

- b. Terminal tracks shall be designated with a “T” followed by a two-digit number, and an assigned three-character [NAM] prefix for terminal designator: [NAM]-T-##. e.g. Transbay tracks **TRA-T-01, T-02**.
- c. Yard tracks shall be designated with “Y” followed by a two-digit number, and an assigned three-character [NAM] prefix for Yard designator: X-[NAM]-Y-##. e.g. **C-MER-Y-01, C-MER-Y-02**.
- d. Yard lead (Transition Tracks) tracks shall be designated with “YL” followed by a one-digit number, and an assigned three-character [NAM] prefix for Yard designator: followed by “1” for entering yard and “2” for exiting: X-[NAM]-YLn. e.g. **C-MER-YL1, C-MER-YL2**.

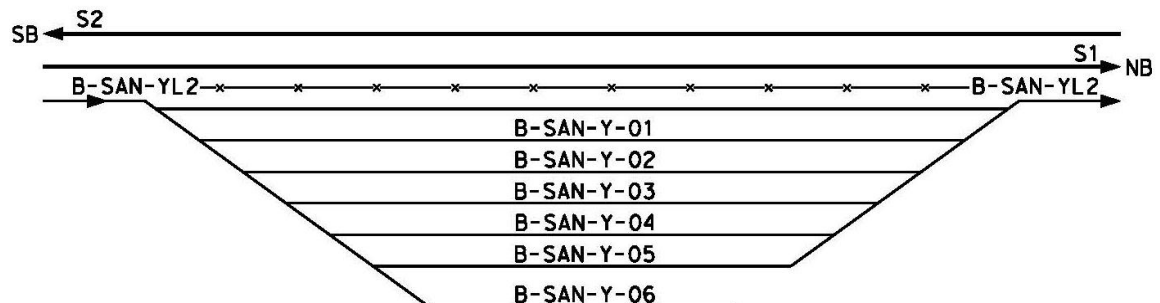


Figure 3 – Yard Tracks

e. Interlocking

Identify Intermediate interlocking using the convention **X-INT-[NAM]** where,

X: Subdivision name
INT: Three-character element designator
[NAM]: Three-character designator for nearest Street

Example: Sierra Subdivision interlocking **S-INT-FLO**

For Station interlocking, add a suffix to the above convention using the convention **X-INT-[NAM]-(S/N)** where,

(S/N): Denotes **S** South of Station or **N** North of Station

Example: Sierra Subdivision station interlocking south of station **S-INT-FLO-S**

4. STATIONING

The southbound HST track centerline shall be the control line for stationing, begin at station 100+00, at milepost 0.0 in San Francisco increasing towards the south to Anaheim. Further, the Capitol, San Jacinto and Pacheco Subdivisions will increase north to south. In order to differentiate the stationing, the two-character track reference designator shall be added as a prefix for all subdivisions: **X###+##**. e.g., Bay SB Track at CP Merced **B8000+00**, Pacheco SB Track CP Merced **P310+00**.

5. ELEMENTS DESIGNATOR:

The following facilities, equipment and devices shall be identified using the convention **X** as prefix, followed by the element's designator:

X: Subdivision name:
B Bay
C Capitol
D Desert
J San Jacinto
P Pacheco
S Sierra
T Tongva

a. Survey Control Monuments

Identify Survey Control Monuments using the convention **X####P** where,

X: Subdivision name:
####: 3-digit number (001-999)
P: Denotes Primary Survey Control Monument Designation

Example: Primary Survey Control Monument in Bay Subdivision **B204P**

b. Access Roadway

Identify Access Roadways using the convention **X-[NAM]-(#)** where,

X: Subdivision name
[NAM] Three-character Access Road designator, street name of Access Road connecting to
(#): 1-digit number if multiple roadways with same street designator (1-9)
Example: Sierra access road from Flore Street, **S-FLO**; Sierra fifth access road from Camino Real, **S-CAM-5**

Temporary Roadways will use the same Access Roadways identifier but will have a “T” suffix. **X-[NAM]-(#)-(T)**.

Example: Sierra Subdivision temporary access road from Second Street, **S-SEC-T**;
Sierra Subdivision second Temporary access road from Third Avenue, **S-THI-2-T**

c. Maintenance / Access Gates

Identify Maintenance / Access Gates using the convention **X-MW[1/2]-[NAM]-(#)** where,

X: Subdivision name
MW: Two-character element designator
[1/2]: Denotes to which track gate is located along, 1 for NB and 2 for SB.
[NAM] Three-character for Access Road designator
(#): 1-digit number if multiple gates with same street designator (1-9)

Example: **S-MW2-FLO; S-MW1-CAM-2**

d. Stations

Identify HST Stations using the convention **X-S-[NAM]** where,

X: Subdivision name
S: One-character element designator
[NAM] Three-character station designator assigned by PMT

SAF	San Francisco	SBB	San Fernando/Branford/Burbank
SFO	Millbrae-SFO	LOS	Los Angeles
MPE	Mid-Peninsula	NSF	Norwalk/ Santa Fe Springs or Fullerton
SJD	San Jose Diridon	ANA	Anaheim
GIL	Gilroy	SGV	San Gabriel Valley
SAC	Sacramento	ONT	Ontario Airport
STO	Stockton	RIV	Riverside
MOD	Downtown Modesto	COR	Corona
MER	Downtown Merced	AFB	March AFB
FRE	Fresno	TEM	Temecula/Murrieta
KTR	Kings/Tulare Regional	ESC	Escondido
BAK	Bakersfield	SAD	San Diego
PAL	Palmdale		

Example: Sierra Fresno Station, **S-S-FRE**

Non HST Stations (through Stations) keep original name.

Example: Caltrain Station, **Burlingame Station**.

e. Platforms

Identify HST Stations Side Platforms using the convention **X-[NAM]-[1]/[2]** where,

X: Subdivision name
[NAM] Three-character station designator assigned by PMT
[1]/[2] Denotes to which track platform is located along, 1 for NB and 2 for SB

Example: Sierra Subdivision Fresno Station southbound side platform, **S-FRE-1**

Identify HST Stations Center and Terminal Platforms using the convention **X-[NAM]-##** where,

X: Subdivision name

[NAM] Three-character station designator assigned by PMT

Denotes numbers of platforms (01-99)

Example: Station along Sierra Subdivision with Center platform at **S-FRE**; Terminal Platforms at Transbay **B-TRA-04**

f. Grade Separated Structures

Identify grade separated structures using the convention **X-{EL}-mp** where,

X: Subdivision name

{EL}: Two-character element designator

UP Underpass

OP Overpass

AS Aerial Structure

BR Bridge

SP Separation

mp: Denotes milepost ##.#, identify northern milepost

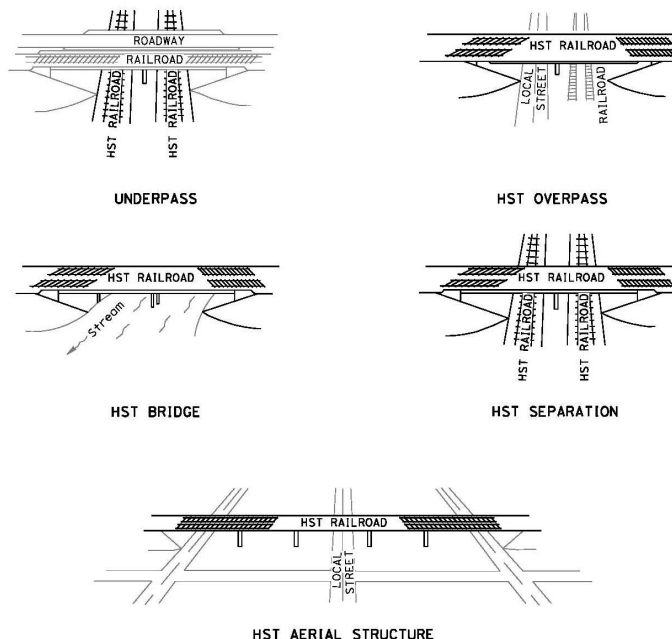
For multi or split structures, add a suffix to the above convention **X-{EL}-mp-[1]/[2]** where,

[1]/[2]: Denotes 1 for NB and 2 for SB, HST Structure

For identifying HST Structure piers and bents, add a two-digit suffix to the above convention **X-{EL}-mp-##** or **X-{EL}-mp-[1]/[2]-##** where,

Note: A Grade Separated Structure may also have a BIN name given by the owner of the structure.

Denotes numbers of bents and piers, from north to south (01-99)



FOR ROADWAY STRUCTURES NOMENCLATURE
REFER TO STRUCTURE TYPES DEFINED
IN THE CALTRANS HIGHWAY DESIGN MANUAL

Figure 4 – Grade Separated Structure Types

Example: Grade separated structures on Sierra Subdivision.

Underpass:	S-UP-170.2	HST Bridge:	S-BR-172.5
HST Overpass:	S-OP-175.5	HST Separation:	S-SP-176.8
HST Aerial Structure:	S-AS-180.5	Piers/bents:	S-AS-187.5-05
HST Aerial Structure(multi):	S-AS-188.4-1	Piers/bents (multi):	S-AS-187.5-1-05

g. Tunnels / Underground Structures

Identify tunnel using the convention **X-TS[1]/[2]-mp-(n)** where,

X:	Subdivision name
TS:	Two-character element designator
[1]/[2]:	Denotes 1 for NB and 2 for SB, only use if single track tunnel track.
mp:	Denotes milepost ##.#, identify northern milepost
(n):	Denotes multi sequential tunnels (1-9)

Example: Bay subdivision northbound single track tunnel, **B-TS1-66.5**; Bay subdivision two track sequential tunnel number 3, **B-TS-77.5-3**

For tunnel infrastructure elements, add a suffix to the above convention using the convention **X-TS[1]/[2]-mp-(n)-{EL}** where,

{EL}	One-character denotes:
P(S/N)	Portal
(S/N):	Denotes S South Portal or N North Portal
V#	Ventilation Structures
#	Denotes quantity, increases in direction of stationing (1-9)
C#	Cross passages
#	Denotes quantity, increases in direction of stationing (1-9)

Example: Bay subdivision northbound single track tunnel, **B-TS1-66.5**;
 North Portal **B-TS1-66.5-PN**
 1st Ventilation Structures **B-TS1-66.9-V1**
 2nd Cross Passages **B-TS1-67.2-C2**

h. Buildings

- Operation Control Centers

Identify Operation Control Centers using the convention **X-OCC-#** where,

X:	Subdivision name
OCC:	Three-character element designator
#	Denotes quantity, increases in direction of stationing (1-9)

Example: Capital subdivision 2nd Operational Control Center **C-OCC-1**

i. Walls

Identify walls using the convention **X-{EL}[1]/[2]-mp** where,

X:	Subdivision name
{EL}:	Two-character element designator
	RW Retaining Wall
	SW Sound Wall
	WW Wind Wall
	IP Intrusion Protection Wall
[1]/[2]:	Denotes 1 for NB and 2 for SB
mp:	Denotes milepost ##.#, identify northern milepost
Example:	Walls located along Sierra Subdivision NB HST Track:
	Retaining Wall S-RW1-188.4
	Sound Wall S-SW1-172.5
	Wind Wall S-WW1-280.4

j. Traction Power

Identify Traction Power facilities according to the convention **X-{TYPE}-[NAM]** where,

X:	Subdivision name
{TYPE}:	Element designator
	SS Substations
	PS Paralleling Stations
	SWS Switching Stations
	PB Phase Break
[NAM]:	Three-character designator for nearest Street
Example:	S-SS-FLO

k. Power Utility Company / HV Electrical Power Connections

Identify Utility Switching Stations according to the convention **X-{TYPE}-[NAM]-USW** where,

X:	Subdivision name
{TYPE}:	Element designator for Type of Traction Power Facility,
	SS Substations
	PS Paralleling Stations
	SWS Switching Stations
[NAM]:	Three-character designator for nearest Street
USW:	Three-character element designator

For HV Connection - tie, add a suffix to the above convention using the convention **X-{TYPE}-[NAM]-USW-HV[kV###]** where,

HV[kV###]:	Character element designator
	### Voltage designation (115, 220, 230 kV)
Example:	S-SS-FLO-USW and S-SS-FLO-USW-HV115

I. Train Control

- Interlocking Houses

Identify Interlocking facilities according to the convention **X-INT-[NAM]-#** and **X-INT-[NAM]-(S/N)-#** where,

X:	Subdivision name
INT:	Three-character element designator
[NAM]:	Three-character designator for nearest Street
(S/N):	Denotes S South of Station or N North of Station
H#:	Denotes quantity of interlocking houses, increases in direction of stationing (1-9)

Example: Intermediate Interlocking **S-INT-FLO-H1** and Interlocking North of Station **S-INT-FLO-N-H1**

m. Communications

- Communications Equipment or shelters co-located with Traction Power Facilities and Train Control Interlocking Houses

Identify Communication Equipment at Traction Power Facilities according to the convention **X-{TYPE}-[NAM]-RT** where,

X:	Subdivision name
{TYPE}:	Element designator
	SS Substations
	PS Paralleling Stations
	SWS Switching Stations
	INT Interlocking Houses
[NAM]:	Three-character designator for nearest Street
RT:	Two-character element designator

Example: **S-SS-FLO-RT**

- Standalone Radio Sites

Identify Standalone Radio Sites Equipment according to the convention **X-ST-[NAM]-RT** where,

X:	Subdivision name
ST:	Standalone Tower
[NAM]:	Three-character designator for nearest Street
RT:	Two-character element designator

Example: **S-ST-FLO-RT**

n. Maintenance Facility

Identify Maintenance Facility using the convention **X-{Type}-[NAM]** where,

X:	Subdivision name
{Type}:	Three-character designator for type of facility
MOE	Maintenance of Equipment
MOI	Maintenance of Infrastructure
[NAM]:	Three-character Maintenance Facility designator assigned by PMT

Example: Bay segment Maintenance of Equipment Facility **B-MOE-GEN**

APPENDIX A

PROJECT NOMENCLATURE / FACILITY NAMING	CODE	EXAMPLE
INFRASTRUCTURE ELEMENTS:		
1. Survey and Mapping		
Survey Markers	X####(P)	B204P
2. Right of Way		
Maintenance / Access Gates	X-MW[1/2]-[NAM](-#)	S-MW2-FLO-2
3. Track Alignment		
Tracks		
- Mainline Tracks	Mn	M1
- Station Tracks	Mn (not 1 or 2)	M5
- Terminal Tracks	[NAM]-T-##	SAF-T-01
- Yard Track	X-[NAM]-Y-##	S-FRE-Y-01
- Yard Track Lead	X-[NAM]-YLn	S-FRE-YL1
- Interlocking		
Interlocking at Stations	X-INT-[NAM]-(S/N)	S-INT-FLO-S
Interlocking Intermediate	X-INT-[NAM]	S-INT-FLO
4. Roadway Works		
Access Roadways	X-[NAM](-#)	S-FLO
5. Temporary Construction Facilities		
Temporary Access Roads	X-[NAM](-#)-T	S-FLO-T
6. Stations		
HST Stations	X-S-[NAM]	S-S-FRE
Non HST Stations (through Stations)	Use current station name	Burlingame Station
Platform		
- Platforms Side	X-[NAM]-[1]/[2]	S-FRE-1
- Platforms Center	X-[NAM]	S-FRE
- Terminal Platform	X-[NAM]-##	B-TRA-04
7. Grade Separation Structures		
Underpass	X-UP-mp	S-UP-170.2
HST Overpass	X-OP-mp	S-OP-175.5
HST Aerial Structure	X-AS-mp	S-AS-180.5
HST Aerial Structure (Two Structures)	X-AS-mp-[1]/[2]	S-AS-188.4-1
HST Bridge	X-BR-mp	S-BR-172.5
HST Separation	X-SP-mp	S-SP-176.8
- Piers / Bents	X-{EL}-##	S-AS-187.5-05
- Piers / Bents (Two-Structures)	X-{EL}-mp-[1]/[2]-##	S-AS-187.5-1-05
8. Tunnels / Underground Structures		
Tunnels	X-TS[1]/[2]-mp-(n)	B-TS2-77.5-3
- Portals	X-TS[1]/[2]-mp-(n)-P(N/S)	B-TS1-66.5-3-PN
- Ventilation Structures	X-TS[1]/[2]-mp-(n)-V#	B-TS1-66.9-3-V1
- Cross Passages	X-TS-mp-(n)-C#	B-TS-67.2-3-C1
9. Buildings		
Operation Control Centers	X-OCC-#	C-OCC-1
10. Earthwork, Retaining Structures and Borrows Sites		
Retaining Walls	X-RW-[1]/[2]-mp	S-RW-1-188.4
Sound Wall	X-SW-[1]/[2]-mp	S-SW1-172.5
Wind Wall	X-WW-[1]/[2]-mp	S-WW1-280.6
11. Hydrology/Hydraulics, Drainage/Grading		
12. Utilities		
13. Geotechnical		
Boring Locations	X####T	S3456R
Sample Locations	TNNX####	S03S00024
14. Seismic		
15. Contaminated Soil / Groundwater		
16. Other		

APPENDIX A

PROJECT NOMENCLATURE / FACILITY NAMING	CODE	EXAMPLE
SYSTEMS ELEMENTS:		
1. Traction Power		
Substations	X-SS-[NAM]	S-SS-FLO
Paralleling Stations	X-PS-[NAM]	S-PS-FLO
Switching Stations	X-SWS-[NAM]	S-SWS-FLO
Phase Break	X-PB-SS-[NAM] or X-PB-SWS-[NAM]	S-PB-SWS-FLO
2. Power Utility Company / HV Electric Power Connections		
Utility Switching Stations	X-SS-[NAM]-USW	S-SS-FLO-USW
HV Connection	X-SS-[NAM]-USW-HV[kV###]	S-SS-FLO-USW-HV115
3. Overhead Contact System (OCS)		
4. Train Control		
Interlocking Houses (Intermediate)	X-INT-[NAM]-H#	S-INT-FLO-H1
Interlocking Houses (Stations)	X-INT-[NAM]-(S/N)-H#	S-INT-FLO-N-H1
5. Communications		
Traction Power Facility and Train Control Interlocking Houses	X-{TYPE}-[NAM]-RT X-SS-[NAM]-RT X-PS-[NAM]-RT X-SWS-[NAM]-RT X-INT-[NAM]-RT	S-SS-FLO-RT
Standalone Radio Tower Site	X-ST-[NAM]-RT	S-ST-FLO-RT
MAINTENANCE ELEMENTS:		
1. Maintenance of Equipment		
Facility	X-MOE-[NAM]	B-MOE-GEN
2. Maintenance of Infrastructure		
Facility	X-MOI-[NAM]	S-MOI-GEN